METHODS OF MANUFACTURE FOR A LOW CONTROL VOLTAGE SWITCH

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a divisional application of U.S. Patent Application Serial No. 10/391,259 filed March 18, 2003, now US patent No 6,730,953 which claims the priority of U.S. Provisional Patent Application Serial No. 60/410647, filed on September 13, 2002, which is herein incorporated in its entirety by reference.

FIELD OF INVENTION

The present invention relates generally to switch devices, and more particularly to solid-state switch devices.

BACKGROUND OF THE INVENTION

Conventional switch devices operate to control the path on which a signal travels. In general, there are two basic types of switch devices in use: electromechanical and solid state. All switches are considered active devices, in that some sort of power supply is required in order to function properly. In electromechanical switches, a contact is provided that physically changes position during the switching process. Solid-state switches do not contain any moving parts and instead use some kind of semiconductor device for the switching process, which are basically either diodes or transistors. In general, diode switches sense current as a control input while switches comprised of transistors sense voltages as control inputs. One example of a transistor-based switch is comprised of a plurality of field effect transistors (FETs). FET switches are generally known to be utilized in connection with high frequency signal transmission, for example, radio frequency (RF).

In general, a FET switch is in an ON state (very low resistance) allowing any signal to pass from the drain to the source of the FET until a control voltage of a